

Pan Li

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EDUCATION

New York University, Stern School of Business

New York, NY

Ph.D. in Information System

(Expected) May 2023

Advisor: Alexander Tuzhilin

University of Science and Technology of China

Anhui, China

B.S., Mathematics & Computer Science (Special Class for the Gifted Young)

June 2017

INDUSTRY EXPERIENCE

Visiting Researcher, Google Brain

2022-2023

Research Intern, Alibaba Inc.

2019; 2020-2021

Research Intern, Baidu Inc.

2016-2017

RESEARCH INTERESTS & METHODOLOGY

- Personalization Techniques: Deep Learning & Recommender System
- Quantitative Marketing: Consumer Behavior Modeling
- Causal Inference: Online Controlled Experiment
- Data Mining: Natural Language Processing & Computer Vision

JOURNAL PUBLICATIONS

[1] **Pan Li**, Brian Brost, Alexander Tuzhilin, “Adversarial Learning for Cross-Domain Recommendations”, Forthcoming at *ACM Transactions on Intelligent Systems and Technology (TIST)* (2022)

[2] **Pan Li**, Alexander Tuzhilin, “Dual Metric Learning for Effective and Efficient Cross-Domain Recommendations”, Forthcoming at *IEEE Transactions on Knowledge and Data Engineering (TKDE)* (2021)

[3] **Pan Li**, Alexander Tuzhilin, “Learning Latent Multi-Criteria Ratings from User Reviews for Recommendations”, Forthcoming at *IEEE Transactions on Knowledge and Data Engineering (TKDE)* (2020)

[4] **Pan Li**, Alexander Tuzhilin, “Latent Unexpected Recommendations”, *ACM Transactions on Intelligent Systems and Technology (TIST)*, 11(6), pp.1-25 (2020)

[5] Chen Zhu, Hengshu Zhu, Hui Xiong, Chao Ma, Fang Xie, Pengliang Ding, **Pan Li**, “Person-Job Fit: Adapting the Right Talent for the Right Job with Joint Representation Learning”, *ACM Transactions on Management Information Systems (TMIS)* 9, no. 3: 1-17 (2018)

JOURNAL PAPERS UNDER REVIEW

[1] **Pan Li**, Alexander Tuzhilin, “When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems” Under Third-Round Review at *Information System Research (ISR)* (after Major Revision)

[2] **Pan Li**, Alexander Tuzhilin, “Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems” Under Second-Round Review at *Management Information System Quarterly (MISQ)* (after Major Revision)

[3] Moshe Unger, **Pan Li**, Maxime Cohen, Brian Brost, Alexander Tuzhilin, “Deep Multi-Objective Multi-Stakeholder Music Recommendation”, Under Second-Round Review at *Information System Research (ISR)* (after Major Revision)

[4] **Pan Li**, Alexander Tuzhilin, “Killing Two Birds with One Stone: Deep Reinforcement Learning for Optimizing Multiple Objectives in Recommender System”, Reject and Resubmit at *Information System Research (ISR)*

[5] Moshe Unger, **Pan Li**, Shahana Sen, Alexander Tuzhilin, “Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings”, Under First-Round Review at *ACM Transactions on Management Information Systems (TMIS)*.

WORKING PAPERS

[1] **Pan Li**, Alexander Tuzhilin, “I want to know more!”: Measuring the Impact of Triggering Consumer Curiosity in Recommender System”, to be submitted to *Marketing Science (MKSC)*

[2] **Pan Li**, Ying Yang, Maofei Que, Ping Yang, Alexander Tuzhilin, “Dual Contrastive Learning for Efficient Static Feature Representation in Recommender System”, in preparation for submission to *Marketing Science (MKSC)*

TOP-TIER CONFERENCE PUBLICATIONS

[1] **Pan Li**, Zhichao Jiang, Maofei Que, Yao Hu, Alexander Tuzhilin, “Dual Attentive Sequential Learning for Cross Domain Click-Through Rate Prediction”, Proceedings of the 27th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD 2021**)
Full Paper with Oral Presentation; Acceptance Rate: 15.4%

[2] **Pan Li**, Maofei Que, Zhichao Jiang, Yao Hu, Alexander Tuzhilin, “PURS: Personalized Unexpected Recommender System for Improving User Satisfaction”, Proceedings of the 14th ACM Conference on Recommender System (**RecSys 2020**)
Full Paper with Oral Presentation; Acceptance Rate: 18%

[3] **Pan Li**, Alexander Tuzhilin, “DDTCDR: Deep Dual Transfer Cross Domain Recommendation”, Proceedings of the 13th International Conference on Web Search and Data Mining (**WSDM 2020**)
Full Paper with Oral Presentation; Acceptance Rate: 15%

[4] **Pan Li**, Alexander Tuzhilin, “Towards Controllable and Personalized Review Generation”, Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing (**EMNLP 2019**)

Full Paper with Poster Presentation; Acceptance Rate: 24.6%

[5] **Pan Li**, Alexander Tuzhilin, “Latent Multi-Criteria Ratings for Recommendations”, Proceedings of the 13th ACM Conference on Recommender Systems (**RecSys 2019**)

Short Paper with Poster Presentation; Acceptance Rate: 19%

[6] **Pan Li**, Alexander Tuzhilin, “Latent Modeling of Unexpectedness for Recommendations”, Proceedings of the 13th ACM Conference on Recommender Systems (**RecSys 2019**)

Late-Breaking Result Track Paper with Poster Presentation; Acceptance Rate: 31%

[7] Tong Xu, Hengshu Zhu, Chen Zhu, **Pan Li**, Hui Xiong, “Measuring the popularity of job skills in recruitment market: A multi-criteria approach”, Proceedings of Thirty-Second AAAI Conference on Artificial Intelligence (**AAAI 2018**)

Full Paper with Poster Presentation; Acceptance Rate: 24.6%

TEACHING EXPERIENCE

New York University

New York, NY

Instructor, Data Science for Business

Summer 2022

- Interactive teaching with a combination of lectures, hands-on sessions and case studies
- 17 students enrolled (undergraduate-level)

New York University

New York, NY

Teaching Fellow, Introduction to AI & Its Applications in Business

Spring 2020, Spring 2021

- Co-design the class materials, homework assignments and final project with the instructor
- Lead of the lab session for 60 students (MSBA and MBA-level)

INVITED TALKS

[1] “Recent Progress on Consumer Exploration”, Invited Industry Talk at Google Brain

[2] “I want to know more!”: Measuring the Impact of Triggering Consumer Curiosity in Recommender System”, ISMS Marketing Science Conference 2022, Virtual (**ISMS 2022**)

[3] “Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings”, ISMS Marketing Science Conference 2022, Virtual (**ISMS 2022**)

[4] “Dual Learning and Cross-Domain Recommender Systems”, Invited Industry Talk at TikTok/ByteDance

[5] “Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems”, The 31st Workshop on Information Technology and Systems, Austin, TX (**WITS 2021 Doctoral Consortium**)

- [6] “Multi-Faceted Consumer Preferences: Incorporating Unexpectedness and Cross-Domain Information into Design of Recommender System”, The 31st Workshop on Information Technology and Systems, Austin, TX (**WITS 2021**)
- [7] “Unexpectedness in Recommender Systems”, Invited Industry Talk at Alibaba
- [8] “Leveraging Multi-Faceted User Preferences for Improving Click-Through Rate Predictions” ACM Conference on Recommender Systems, Virtual (**RecSys 2021 Doctoral Consortium**)
- [9] “When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems”, Conference on Information Systems and Technology 2021, Anaheim, CA (**CIST 2021**)
- [10] “Incorporating Dual Metric with Sequential Learning for Cross-Domain Recommendations”, Conference on Information Systems and Technology 2021, Anaheim, CA (**CIST 2021**)
- [11] “When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems”, ISMS Marketing Science Conference 2021, Virtual (**ISMS 2021**)
- [12] “Adversarial Learning for Cross-Domain Recommendations”, The 30th Workshop on Information Technology and Systems, Virtual (**WITS 2020**)
- [13] “Will Unexpectedness Help Recommendations and When: Evidence from A Large-Scale Online Controlled Experiment”, Conference on Information Systems and Technology 2020, Virtual (**CIST 2020**)
- [14] “Dual Learning for Cross-Domain Recommendations: Improving Efficiency and Effectiveness of Recommender Systems” , Conference on Information Systems and Technology 2020, Virtual (**CIST 2020**)
- [15] “Hybrid Utility Function for Unexpected Recommendations”, International Conference on Web Search and Data Mining, Houston, TX (**WSDM 2020 Doctoral Consortium**)

AWARDS

NYU Fubon Doctoral Fellowship	2022-2023
INFORMS Marketing Science Doctoral Consortium	2022
WITS Best Dissertation Award	2021
WITS Best Student Paper Runner-Up Award	2021
SIGIR Travel Award	2020
NYU Stern PhD Fellowship	2017-2022

ACADEMIC SERVICE

Program Committee: INFORMS Workshop on Data Science, ACM Conference on Recommender System, Empirical Methods in Natural Language Processing

Invited Reviewer: Management Science, IEEE TKDE, ACM TIST, ACM TMIS, IEEE Intelligent System, ACL, EMNLP, ICIS, CIST, WITS

SELECTED COURSEWORK

- Research Seminar in Data Science (by Foster Provost)
- Doctoral Seminar in Digital Economics (by Arun Sundararajan)
- Research Seminar in IT & Organizations: Social Perspectives (by Natalia Levina)
- Causal Inference (by Jennifer Hill)
- Econometrics I & II (by William Greene)
- Deep Reinforcement Learning (by Lerrel Pinto)
- Convex Optimization (by Jiawei Zhang)
- Stochastic Calculus (by Paul Bourgade)
- High Performance Machine Learning (by Alessandro Morari)